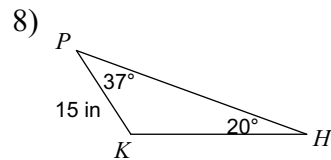
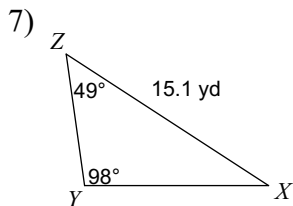
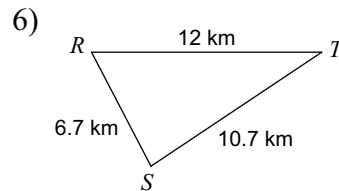
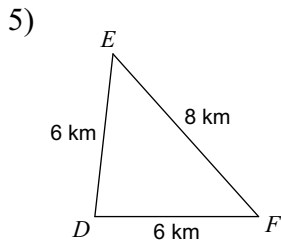
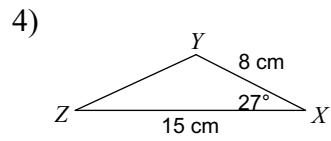
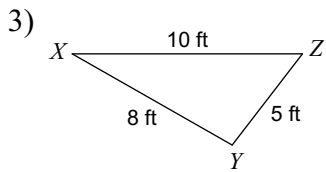
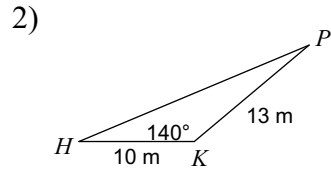
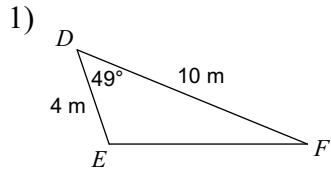
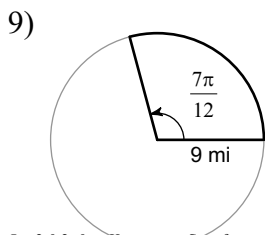


SM3 HW#6-9 (area of triangles and review)

Find the area of each triangle to the nearest tenth.

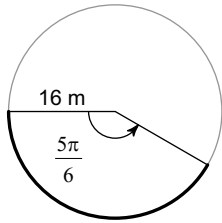


Find the area of each sector. Your answers should be in reduced fraction form with PI in your answer.



Find the length of each arc. Your answers should be in reduced fraction form with PI in your answer.

10)



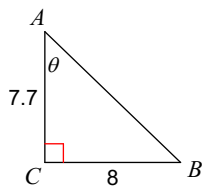
Use the given point on the terminal side of angle θ to find the EXACT value of the trigonometric function indicated (simplified radical/fraction form).

11) $\csc \theta; (-2, -\sqrt{5})$

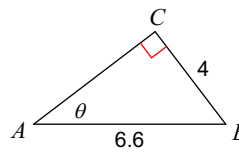
12) $\cos \theta; (-9, \sqrt{19})$

Find the measure of each angle indicated. Round to the nearest tenth.

13)

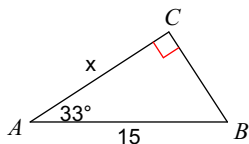


14)

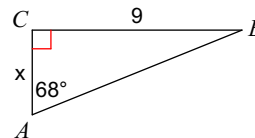


Find the measure of each side indicated. Round to the nearest tenth.

15)



16)



Find all zeros. If a zero is repeated, state its multiplicity.

17) $y = x(x - 2)(x - 1)^2$

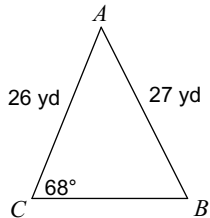
Find all zeros using factoring (some have a common factor, all are factor by box).

18) $f(x) = x^3 - 4x^2 + x - 4$

19) $f(x) = x^3 + 5x^2 - x - 5$

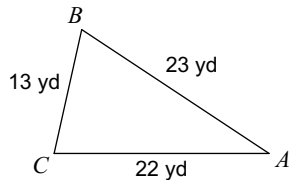
Find each measurement indicated. Round your answers to the nearest tenth.

20) Find $m\angle B$



Solve each triangle. Round your answers to the nearest tenth.

21)



22) The terminal side of an angle passes through the point $(-5, -8)$. What is:

a) θ_{ref}

b) θ_{std}

c) $\cos \theta$

23) A Ferris wheel has a diameter of 100 ft. The bottom of the Ferris wheel is 5 feet above the ground. It completes two rotations every 5 minutes. What is the equation that models height as a function of time? Please draw the picture and label the distances given before starting your calculations

$$h(t) = a \sin wt + k$$